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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/468,155	12/21/1999	ROBERT S. GRANT	15-IS-5295	3289

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EXAMINER

DASTOURI, MEHRDAD

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/468,155

Applicant(s)

GRANT ET AL.

Examiner

Mehrdad Dastouri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicants' response filed August 1, 2003, has been entered and made of record.
2. Applicants' arguments have been fully considered but they are not persuasive.

Applicants in essence are attacking the teachings of the secondary prior art of record (Antognini) for the limitations taught by the primary prior art of record (Killcommons). The versatile system taught by Killcommons is a web-based system implemented to facilitate manipulation (storage, retrieval and transmission) of plurality of images stored in different remote locations and the capability of transferring image data between different locations for simultaneous viewing of medical images by experts at remote locations to assist in the diagnosis and treatment of distant patients (Figures 1, 2A-2D and 4). In particular the teachings of Killcommons are relied upon for disclosing a server as clearly depicted in Figure 1 of Killcommons invention. Killcommons image data would clearly include some identification data that is input at the modality. The teachings of Antognini et al (Secondary prior art of record) have been merely cited for notorious data processing procedures routinely implemented in document (file) management systems (i.e., storing identification data associated with the input data).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6-12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Killcommons et al. (hereinafter Killcommons), U.S. 6,424,996 in view of Antognini et al. (hereinafter Antognini), U.S. 5,649,185.

Regarding Claim 1, Killcommons discloses:

a network extending between first and second locations (Column 1, Lines 15-20; Column 2, Lines 15-22; Column 3, Lines 58-66);

a server (Figure 1, Server 20) located at the first location and connected to facilitate transfer of data between the first image storage unit and the second image storage unit through the network (Figures 2A-2D; Column 7, Lines 7-10. Figures 2A-2D depict configurations that can be networked together.), and

a first imaging device (Modality 12, Column 7, Lines 3-6) located at the first location and connected to generate for transmission on the network first imaging data resulting from a first patient and first identification data identifying the first imaging data (Figures 1, 2A-2D; Column 5, Lines 6-31, Patient Histories; Column 7, Lines 44-67, Column 8, Lines 1-9);

a first interface unit (Figures 2A-2D, Data Interface 22) located at the first location and arranged to store first stored imaging data on the first image storage unit in response to the first imaging data (Figures 2A-2D, Storage Unit 30);

a second imaging device located at the second location (Figure 1, Second Modality 16; Column 7, Lines 4-6) and connected to generate for transmission on the network second imaging data resulting from a second patient and first identification data (Patient Histories, Column 5, Lines 27-31) identifying the first imaging data (Figures 1,

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2A-2D; Column 5, Lines 6-31, Patient Histories; Column 7, Lines 44-67, Column 8, Lines 1-9);

a second interface unit (Figures 2A-2D, Data Interface 22) located at the second location and arranged to store second stored imaging data on the second image storage unit in response to the first imaging data (Figures 2A-2D, Storage Unit 30.

Killcommons system is web-based and therefore accessible by multiple remote users as shown in Figure 1, Elements 50 (First User Unit) and 80 (Second User Unit);

a first workstation located at the first location (Figure 1, First User Unit, Element 50; Column 11, Lines 4-7 and 18-23) and connected to create a first image in response to the first stored image data (Figure 1, Modality 12 or 16), to create a second image in response to the second stored image data, to view said first and second identification data in the server through said network (Figures 1 and 2A-2D; Column 5, Lines 17-22) and to transmit at least a first request (Column 4, Lines 31-67) for the second stored image data from the second image storage unit resulting in transfer of the second stored image data from the second image storage unit so that said second image can be created at the first workstation (Figures 1, 2A-2D and 4, Storage Unit 30 in Server 20 or Remote Users; Column 5, Lines 10-22); and

a second workstation located at the second location (Figure 1, Second User Unit, Element 80; Column 11, Lines 4-7 and 18-23) and connected to create a third image in response to the first stored image data (Figure 1, Modality 12 or 16; Figure 4; Column 13, Lines 35-51, Radiology Images 75), to create a fourth image in response to the second stored image data, to view said first and second identification data in the server

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through said network (Figures 1 and 2A-2D; Column 5, Lines 17-22) and to transmit at least a second request (Column 4, Lines 31-67) for the first stored image data from the first image storage unit resulting in transfer of the first stored image data from the first image storage unit so that said first image can be created at the first workstation (Figures 1, 2A-2D and 4, Storage Unit 30 in Server 20 or Remote Users; Column 5, Lines 10-22).

The versatile system taught by Killcommons is a web-based system implemented to facilitate manipulation of plurality of images stored in different remote locations and the capability of simultaneous retrieving, viewing and processing of medical images by experts in remote locations to assist in the diagnosis and treatment of distant patients (Figures 1, 2A-2B and 4; Column 7, Lines 10-14 and 61-65, and other portions recited above). For further emphasis, as a notorious data processing procedure routinely implemented in document (file) management systems, teachings of Antognini are also recited concerning acquiring multiple copies by various users (Column 18, Lines 61-67, Column 19, Lines 1-10) and that the individual users can manipulate the images in whatever manner they like including making changes.

Although Killcommons does not explicitly disclose storing first or second stored identification data on the server in response to the second identification data as provided by the first or second interface, the Killcommons' invention image data would clearly include appropriate identification data that is input at the modality.

However, Antognini teaches a document management (library) server including a database describing the contents of the library (Column 4, Lines 50-60) responsive to

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the identification data provided by the client via first or second interfaces (See Figure 1, Elements 5, 2, 5', 2' and library server or library client).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the document (file) management data processing configuration of Antognini in support of the medical imaging system of Killcommons to provide on-demand access to data objects by moving images between a client process and a storage process (Antognini, Column 1, Lines 64-66, Column 2, Lines 10-15).

As per Claim 2, Killcommons teaches:

wherein said network comprises a high-speed network (Column 1, Lines 35-37).

As per Claim 3, Killcommons teaches:

wherein said network comprises an ATM (Column 8, Lines 5-7).

As per Claim 4, Killcommons teaches:

wherein said network comprises a slow speed network (ISDN, Column 10, Lines 60-66. The Examiner is interpreting slow speed to be less than 155 Mbytes/s since the disclosure defines high speed to be at least 155 Mega bytes) and wherein said apparatus further comprises a first image transfer server located at said first location and a second image transfer server located at the second location (Figures 2A-2D; Column 10, Lines 46-57), the first and second image transfer servers being connected to transfer the first stored image data to the second image storage unit through the network and to transfer the second stored image data to the first image storage unit through the network (Figures 1, 2A-2D, Server 20).

As per Claim 6, Killcommons teaches:

a radiology information system and wherein a portion of the first identification data is provided by the radiology information system (Column 3, Lines 58-61).

Killcommons annotation data would clearly include some identification data that is input at the modality. See Column 6, Lines 65-67).

As per Claim 7, Killcommons teaches:

wherein the first imaging device comprises a computed Tomography unit (Column 7, Lines 25-26).

As per Claim 8, Killcommons teaches:

wherein the first imaging device comprises a magnetic resonance imaging device (Column 7, Line 25).

With regards to Claims 9-12 and 14-16, arguments analogous to those presented for Claims 1-4 and 6-8 above are applicable to Claims 9-12 and 14-16.

5. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Killcommons et al. (hereinafter Killcommons), U.S. 6,424,996 further in view of Antognini et al. (hereinafter Antognini), U.S. 5,649,185 and Computer Dictionary, Third Edition, Microsoft Press, 1997, ISBN: 1-57231-446-X, Page 462.

As per Claim 5, Killcommons teaches a variety of connection possibilities (Figure 3; Column 10, Lines 60-66). But Killcommons does not specifically teach a T1 connection.

However, the Computer Dictionary teaches that T1 connections are well known (Page 462, Definition of T-carrier). AT&T introduced T-carrier service in 1993 which is defined by 4 levels: T1, T2, T3 and T4. Therefore, Computer Dictionary teaches:

wherein the network comprises a T-1 telephone line (Page 462).

It would have been obvious to one of ordinary skill in the art to use a T1 line to network the various computers on a T-carrier system to increase transmission capabilities of a system as taught by Killcommons and Antognini to facilitate using off-the shelf equipment thereby reducing the cost of implementing a telemedicine system.

Conclusion

6. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehrdad Dastouri whose telephone number is (703) 305-2438. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703) 308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mehrdad Dastouri
Primary Examiner
Group Art Unit 2623
July 12, 2004

MEHRDAD DASTOURI
PRIMARY EXAMINER

